Work Order ID 108451 October-17-13 1:31:12 PM				*108451*									
Item ID: Di Revision ID: Item Name: Cu	3009-3			Accept		*N900	<b>040</b>	100	<b>)</b> * s	Setup Sta	IV	S1* S2*	
Start Date: 10 Required Date: 10 Reference:	)/17/13 )/17/13	<b>Start Qty:</b> 60.00 <b>Req'd Qty:</b> 60.00	*60* *60*			Cust Item I Customer:	D:						
Approvals: P		Plan: <u>似</u> し	- '				nte:		I	Run Sta Sto	1/1	R1* R2*	
Sequence ID/ Work Center ID		Operation Description		Set U Run I	p/ Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr	I	Revision Nbr											
D3009	F	Rev B											
100 <b>*1 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</b>		Hardinge CNC LATHE	SMALL	0.00	OAS 40 2-89	13/10/2	<u>L</u> S		60	Ø	Ď		
Hardinge CNC Lathe S	mall	1-TURN A FOLIO RE DWG REV		'G D3009	-					e.		·	

110

QC2- Inspect parts off machine FAI/FAIB

2-DEBURR AS REQUIRED

0.00

\*110\* QC

Memo

0.00

DAS 40 13/10/25

60 Ø

Quality Control

	-	-	
Date:			

DQA:

NCR: Y	es / No	)			<b>WORK ORDER NON-</b>	CONF	ORN	ANCE / UPE	DATE	·			
										QA Closed:	Date		
Work Orde	r:				DISPOSITION	_	AGAINST DEPARTMENT/PROCESS						
Part No.				<del></del>	Rework Scrap Use-as-is	       ,	Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing			Water Jet Prod. Eng. Coor. Rec/Store/Packaging		Engineering Quality Other	
NCR N	lo				Work Order Update	]		Large Fab	Composite		Supplier		
Root				Descr	iption of work order update	Init	tial	Act	ion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chief	f Eng	Descr	iption	Date	Verification	QC Inspector	
oc/Data quip/Tooling										=			
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ther			l				Ì						
rocess			Į.										
upplier													
raining				ļ		1							
Inapproved										<u></u>			
					<del></del>	FAULT	CATE	GORY					
Landir	ng Gear			F	General	_			<del></del>	1	_	7	
	Bendii	•		<u> </u>	Bend	<b>—</b>	rain		<u> </u>	Ovalized	<u> </u> _	Pressure/Forced	
	Centre	Not Conce	entric to	o/s	BOM/Route	$\vdash$	ardwa		<u> </u>	Over/Under	— —	Temperature/Cure	
	Cracks		Broken/Damaged	-	-	on Incomplete	<b></b>	Part Incorre	<del></del>	Weld			
	_	d/Crimped	1	_	Burrs	_		ions Incomplete/L		Part Lost/Mi	issing	Wrong Stock Pulled	
	Cuffs			_	Contamination	$\mathbf{H}$		nance		Part Moved			
	Heat Treat		Countersink	Шм	lislabe	led		Positioned V		7			
	Inspection Strip in Tube		Cut Too Short	$\vdash$	Misread			Power Loss/	Surge	Other			
	Ripple	s in Bend			Drill Holes	$\vdash$	ffset						
	Torqu	e Waves in	Extrusio	n L	Drawing			Calibration					
	Turnir	g Sequence	e	1	Finish Out of		ut of S	Sequence					

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 108451 October-17-13 1:31:12 PM D3009-3 Accept Item ID: Setup Start \*N900040100\* **Revision ID:** Cup Item Name: \*60\* 10/17/13 **Start Qty: 60.00 Start Date:** Cust Item ID: Required Date: 10/17/13 Req'd Qty: 60.00 \*60\* **Customer:** Reference: Run Process Plan: Date: Tooling: Date: Approvals: Stop QC: \_\_\_\_\_ Date: \_\_\_\_ SPC (Y/N): Date: Tool ID Tool # Plan Reject Sequence ID/ Operation Set Up/ Accept Reject Work Center ID **Description Run Hours** Code Qty Qty Number Stamp 0.00120 QC8- Inspect parts - second check 60 \*120\* 0.00 Memo Quality Control Identify as per dwg & Stock Location: WA 6 130 60 13/1/29 \*120\* 0.00 Packaging Memo \*\*\*\*\*STOCK IN LARGE FAB\*\*\*\*\* Packaging

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

\*140\*

Quality Control

Page 2

Insp.

JL 13-10-28

DQA: Date: Yes / No **WORK ORDER NON-CONFORMANCE / UPDATE** NCR: QA Closed: Date: **AGAINST DEPARTMENT/PROCESS** DISPOSITION Work Order: Engineering Skid-tube Crosstube Water Jet Rework Part No. Machining Prod. Eng. Coor. Quality Small Fab Scrap Thermoforming Finishing Rec/Store/Packaging Other Use-as-is NCR No. Work Order Update Large Fab Composite Supplier Description of work order update Sign & Action Root Initial Chief Eng Date Qty or Non-conformance Verification Cause Step Description Date QC Inspector Doc/Data Equip/Tooling Operator Material Setup Other **Process** Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Bending Bend Grain Ovalized Pressure/Forced BOM/Route Centre Not Concentric to O/S Hardware Over/Under tolerance Temperature/Cure Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled

Maintenance

**Out of Calibration** 

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Part Moved

Positioned Wrong

Power Loss/Surge

Other

Contamination

Countersink

**Cut Too Short** 

**Drill Holes** 

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

**Turning Sequence** 

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

**Torque Waves in Extrusion** 

Page 1/

Work Order ID:

108451

Parent Item:

D3009-3

Parent Item Name:

Cup

**Start Date: 10/17/13** 

Required Date: 10/17/13

**Start Qty:** 60.00

Required Qty: 60.00

Comments:

IPP A 07.12.18new issue EC

IPP Rev:B 08-01-08 ECN 1089 rev:b as per dwg DD veryfied by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R1.000		Purchased	No			110	f	16.8660	0.0479	3.025266	źΔ.	12	101-1
304 round bar 1.00									C-C		40	<del>3</del> 4 - 10,	401.25
				<b>Location</b>		Loc Qty	Lo	: Code			<b>9</b> -8	3	
				MAT012		16.866							
				→ m1267	726	16.866				3			

ģ

									DQA:	Date:			
NCR: Y	es / No				WORK ORDER NON-O	CONFO	RMANCE / UPI	DATE	·				
···									QA Closed:	Date:			
Work Orde	er:				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No					Rework Scrap Use-as-is Work Order Update	Skid-tube  Machining ermoforming  Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other			
Root				Descri	iption of work order update	Initia	l Act	tion	Sign &				
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng Descr	ription	Date	Verification	QC Inspector		
Doc/Data										}			
Equip/Tooling													
Operator													
Material													
Setup		:											
Other		•											
Process													
Supplier Training									]				
Unapproved		1											
опарргочец		<u> </u>	<u> </u>	l .		AULT CA	TEGORY		1	<u> </u>			
Landi	ng Gear				General	7.021 07.							
	Bending				Bend	Grai	in		Ovalized		Pressure/Forced		
	Centre N	lot Conce	ntric to	o/s	BOM/Route	Hard	lware		Over/Under	tolerance	Temperature/Cure		
	Cracks				Broken/Damaged	Inspe	ection Incomplete		Part Incorred	it 🗍	Weld		
	Crushed	/Crimped			Burrs	Instr	uctions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled		
2	Cuffs				Contamination	Mai	ntenance		Part Moved		-		
	Heat Tre	at			Countersink	Misla	abeled		Positioned V	Vrong	_		
	Inspection	on Strip in	1 Tube		Cut Too Short	Misr	ead		Power Loss/	Surge	Other		
	Ripples in Bend		Drill Holes	Offse	et								
	Torque Waves in Extrusion		Drawing	Out	of Calibration								
		Sequence			Finish	Out	of Sequence						
	Wave/T	wist in Tu	be		Folio	Outs	side Dimensions						

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	108421
Description: Cup	Part Number:	D3009-3
Inspection Dwg: D3009 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

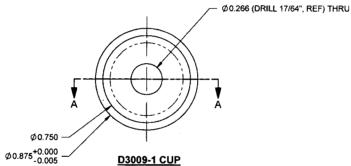
Х	First Article		Prototype
---	---------------	--	-----------

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.875	+0.000/-0.005	.872			NEW	P40-12
Ø0.750	+0.008/-0.001	-753			11	
Ø0.266	+0.006/-0.001	.266	V		ı`	• •
R0.062	+/-0.010	.062	V		Rad G	
0.094	+/-0.010	. 091	V		VERN	P40-12
0.353	+/-0.010	.348	V		.(	
0.063	+/-0.010	.059			14	٠,
R0.032 x 45°	+/-0.010	- 027	~			• •
						·
	QAS )					

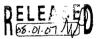
Measured by:	4 <b>U</b> /	Audited by:	2	Prototype Approval:	N/A
Date:	13/10/25	Date:	13-10-28	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	08.01.22	New Issue	KJ/EC/DD	<i>X</i>

R0.062 --R0.032 x 45\* CHAMFER 0.094 0.353 0.063 (REF) SECTION A-A



13-01-21



В	NOW 10	W/REFORMAT D 018-1025 (A8), 0. (C5), ADD D300	DWG, D3009-1 MAT'L WAS 1010-1025 353 WAS 0.363 (D7), Ø0.266 WAS 9-3 (SHEET 2)	СР	07.12.12
Α	NEW IS	SUE		RF	01.03.23
REV.			DESCRIPTION	BY	DATE
DESIGN		$\alpha$	DART AEROCRA	CELI	רה

DESIGN	9/1	DART AERO	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA				
DRAWN	9						
CHECKED	B	DRAWING NO.	REV. B				
MFG. APPR.	14	D3009	SHEET 1 OF 2				
APPROVED		TITLE	SCALE				
DE APPR.	-#	CUP	2:1				
DATE 07.1	2.12	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIMATE AND COMPRIENTUL AND IS SUPPLIED ON THE EXPRESS COMPTION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OF COMPRIENCE THE TO ANY OTHER PERSON WITHOUT					

NOTES:
1) MATERIAL:AISI 1018-1025 ROUND BAR
(REF DART SPEC M1018-R)
2) FINISH: NIA
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.03 lbs

R0.062 --R0.032 x 45° CHAMFER 0.094 0.353 0.063 (REF) SECTION B-B С Ø0.266 (DRILL 17/64", REF) THRU Ø0.750 -Ø0.875<sup>+0.000</sup> D3009-3 CUP NOTES:
1) MATERIAL:AISI 304/316 STAINLESS STEEL ROUND BAR
(REF DART SPEC M304R)
2) FINISH: NIA
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.03 lbs

DESIGN	91	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	01		
CHECKED	B	DRAWING NO.	REV. B
MFG. APPR.	JF.	D3009	SHEET 2 OF 2
APPROVED	-#	TITLE	SCALE
DE APPR.	-#-	CUP	2:1
DATE 07.12.12		THE DOOMST REPORT OF 2001 BY DART AEROSPACE LTD THIS DOOMST REPORT NO CONTRIBUTION, NOT BE EXPENDED CONTRIBUTION OF THE PURPOSE CONTRIBUTION OF THE EXPENDED CONT	